

REMARKS

Claims 1-14 and 57-73 remain in the present application. Claims 67-73 are added herein. Claims 1 and 57-58 are amended herein. Applicant respectfully submits that no new matter has been added as a result of the claim additions and amendments. Applicant respectfully requests further examination and reconsideration of the rejections based on the amendments and arguments set forth below.

Allowable Subject Matter

Applicant would like to thank the Examiner for the indication that Claims 7-14 and 59-66 would be allowable if rewritten in independent form including all of the limitations of any base claims and any intervening claims.

Claim Rejections – 35 U.S.C. §102

Claims 1-7 and 57

Claims 1-7 and 57 are rejected in the present Office Action under 35 U.S.C. §102(e) as being anticipated by United States Patent Number 6,831,617 to Miyauchi (hereafter referred to as “Miyauchi”). Applicant has reviewed the cited reference and respectfully submits that the embodiments of the present invention as recited in Claims 1-7 and 57 are neither anticipated nor rendered obvious by Miyauchi for the following reasons.

Applicant respectfully directs the Examiner to independent Claim 1, which recites a data processing pipeline comprising (emphasis added):

a first circuit for classifying a received data set, wherein the first circuit is operable to select a process mode for processing the received

data set to reduce power consumption without significantly sacrificing quality and performance, and wherein the process mode is selected based upon a classification of the received data set; and

a second circuit coupled to the first circuit, wherein the second circuit is operable to process data received from the first circuit, and wherein processing is performed in accordance with the process mode selected by the first circuit.

Independent Claims 57 and 58 recite limitations similar to independent Claim 1.

Claims 2-7 depend from independent Claim 1 and recite further limitations to the claimed invention.

Applicant respectfully submits that Miyauchi fails to teach or suggest the limitations of “wherein the first circuit is operable to select a process mode for processing the received data set to reduce power consumption without significantly sacrificing quality and performance” as recited in independent Claim 1.

1. As recited and described in the present application, a first circuit is operable to select a process mode for processing a received data set to reduce power consumption without significantly sacrificing quality and performance. As such, power is saved by more efficient processing such that quality and performance are not significantly sacrificed.

In contrast to the claimed embodiments, Applicant understands Miyauchi to teach reducing power consumption by means that *significantly decrease* quality and/or performance of the resultant display. For example, Miyauchi teaches that power consumption can be reduced by reducing frame rate (col. 2, lines 24-30) and displaying a low-gradation image (col. 2, lines 31-36). Applicant respectfully submits that a reduction in frame rate amounts to a significant reduction in graphics processing performance. Additionally, Applicant respectfully submits that displaying a low-gradation image instead of a high-gradation image amounts to a significant reduction in image quality. As such,

Miyauchi teaches away from the claimed embodiments by teaching power reduction by means that significantly reduce quality and performance instead of through data processing without a significant reduction in quality and performance as claimed.

For these reasons, Applicant respectfully submits that independent Claim 1 is neither anticipated nor rendered obvious by Miyauchi, thereby overcoming the 35 U.S.C. §102(e) rejection of record. Since independent Claim 57 contains limitations similar to those discussed above with respect to independent Claim 1, independent Claim 57 also overcomes the 35 U.S.C. §102(e) rejections of record. Since dependent Claims 2-7 recite further limitations to the invention claimed in independent Claim 1, dependent Claims 2-7 are also neither anticipated nor rendered obvious by Miyauchi. Therefore, Claims 1-7 and 57 are allowable.

Claim 58 and 67-73

Claim 58 is rejected in the present Office Action under 35 U.S.C. §102(e) as being anticipated by Miyauchi. Applicant has reviewed the cited reference and respectfully submits that the embodiments of the present invention as recited in Claim 58 and Claims 67-73 are neither anticipated nor rendered obvious by Miyauchi for the following reasons.

Applicant respectfully directs the Examiner to independent Claim 58, which recites a method for processing graphics comprising (emphasis added):

classifying a primitive into a classification based on its size and other characteristics; and

based on the classification, selecting a processing mode to compute setup equations for the primitive to reduce power consumption without significantly sacrificing quality and performance.

Independent Claim 67 recites limitations similar to independent Claim 58.

Claims 68-73 depend from independent Claim 67 and recite further limitations to the claimed invention.

Applicant respectfully submits that Miyauchi fails to teach or suggest the limitations of “classifying a primitive into a classification based on its size and other characteristics” as recited in independent Claim 58, and similarly recited in independent Claim 67. As recited and described in the present application, a primitive is classified based on its size and other characteristics, where this classification is then used to select a processing mode that reduces power consumption.

In contrast to the claimed embodiments, Applicant understands Miyauchi to teach classification of data based on characteristics of a display device. For example, Miyauchi teaches that “display data [is] classified in response to the display areas and display type” (Abstract). Applicant respectfully submits that data classification based upon characteristics of a display device is very different from classification based upon characteristics of a primitive used in graphics processing as claimed. As such, Miyauchi teaches away from the claimed embodiments by teaching data classification based upon characteristics of a display device instead of classification based upon characteristics of a primitive as claimed.

For these reasons, Applicant respectfully submits that independent Claim 58 is neither anticipated nor rendered obvious by Miyauchi, thereby overcoming

the 35 U.S.C. §102(e) rejection of record. Since independent Claim 67 contains limitations similar to those discussed above with respect to independent Claim 58, independent Claim 67 also overcomes the 35 U.S.C. §102(e) rejections of record. Since dependent Claims 68-73 recite further limitations to the invention claimed in independent Claim 67, dependent Claims 68-73 are also neither anticipated nor rendered obvious by Miyauchi. Therefore, Claims 58 and 67-73 are allowable.

CONCLUSION

Applicant respectfully submits that Claims 1-14 and 57-73 are in condition for allowance and Applicant earnestly solicits such action from the Examiner.

The Examiner is urged to contact Applicant's undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Please charge any additional fees or apply any credits to our PTO deposit account number: 23-0085.

Respectfully submitted,

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